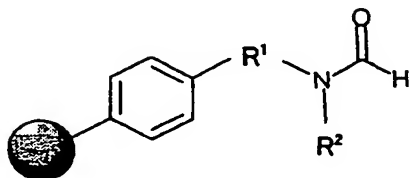


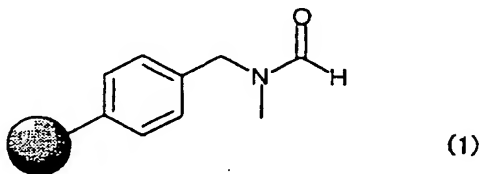
## CLAIMS

1. Polymer-immobilized formamide characterized by being represented by the general formula:

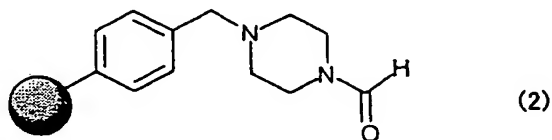


(wherein R<sup>1</sup> is an optionally substituted hydrocarbon chain which may have a cyclic moiety or a heteroatom; R<sup>2</sup> is an optionally substituted hydrocarbon group or an optionally substituted hydrocarbon chain which is bound to R<sup>1</sup> to form a ring; and the solid circle represents a polymer).

2. The polymer-immobilized formamide according to claim 1, characterized by being represented by the formula:



3. The polymer-immobilized formamide according to claim 1, characterized by being represented by the formula:



4. A reaction catalyst comprising any one of the polymer-immobilized formamides according to claims 1-3 as an active ingredient.

**5. A process for allylation of an aldehyde compound characterized by causing an aldehyde compound to react with allyl trihalogenosilane in the presence of the polymer-immobilized formamides according to claims 1-3, to synthesize an allyl alcohol compound.**

**6. The allylation process according to claim 5, wherein the reaction is conducted in the presence of a polar solvent.**

**7. A process for allylation of a hydrazone compound characterized by causing a hydrazone compound to react with allyl trihalogenosilane in the presence of the polymer-immobilized formamides according to claims 1-3, to synthesize an allyl hydrazine compound.**

**8. The allylation process according to claim 7, wherein the reaction is conducted in the presence of a polar solvent.**